

(No Model.)

D. D. BUICK.
WATER CLOSET.

No. 558,932.

Patented Apr. 28, 1896.

Fig. 2.

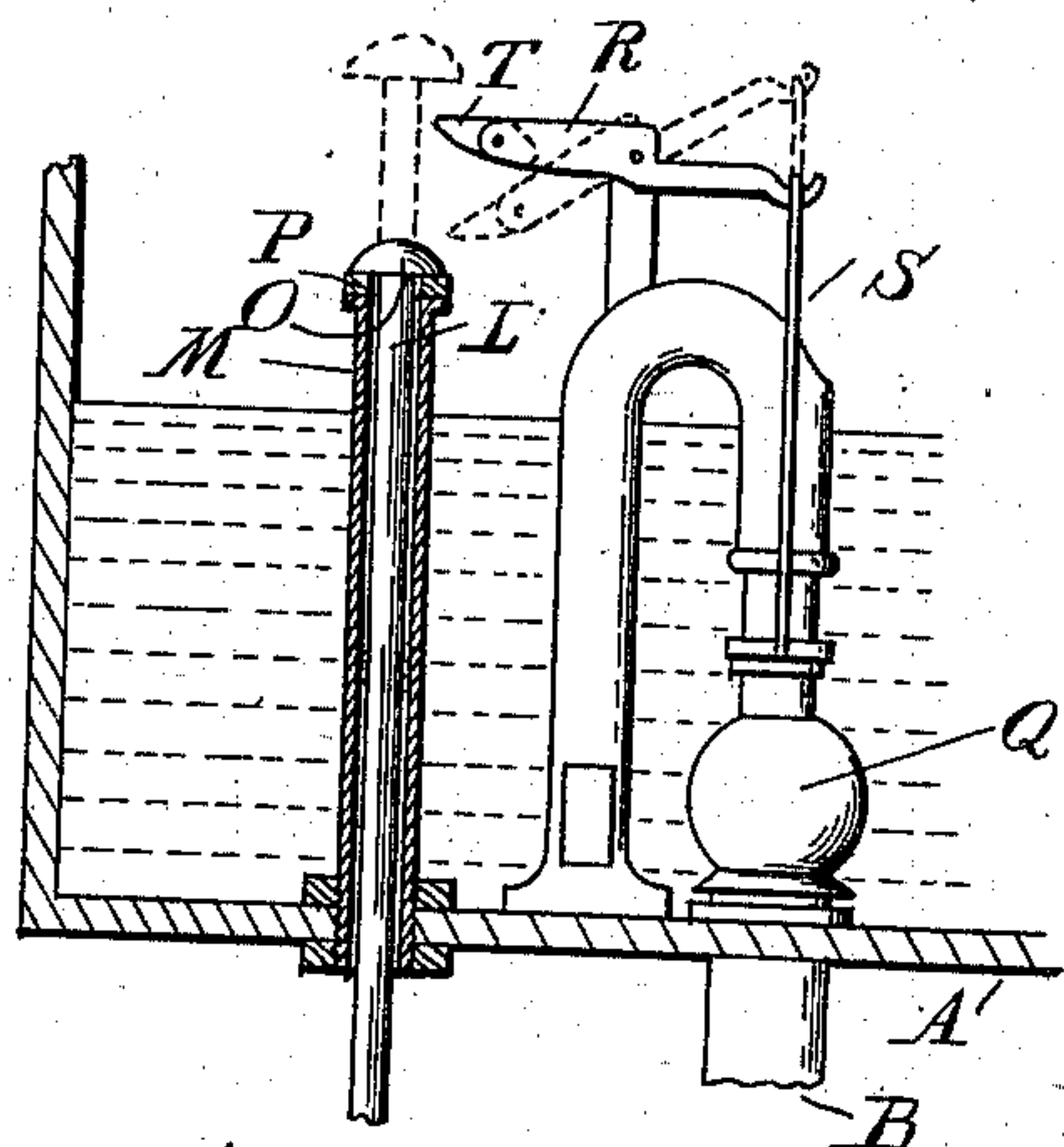


Fig. 4.

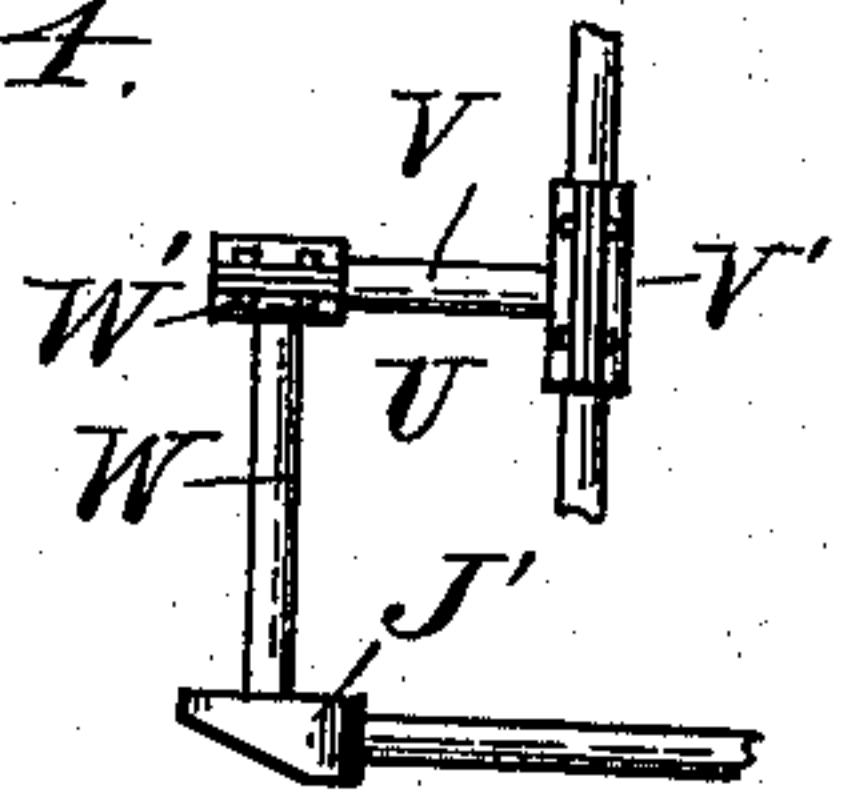


Fig. 5.

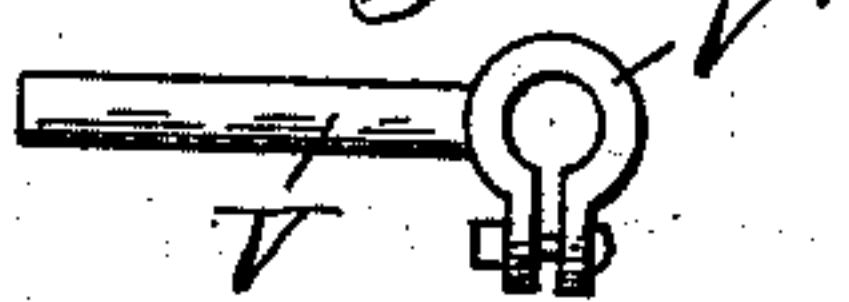


Fig. 3.

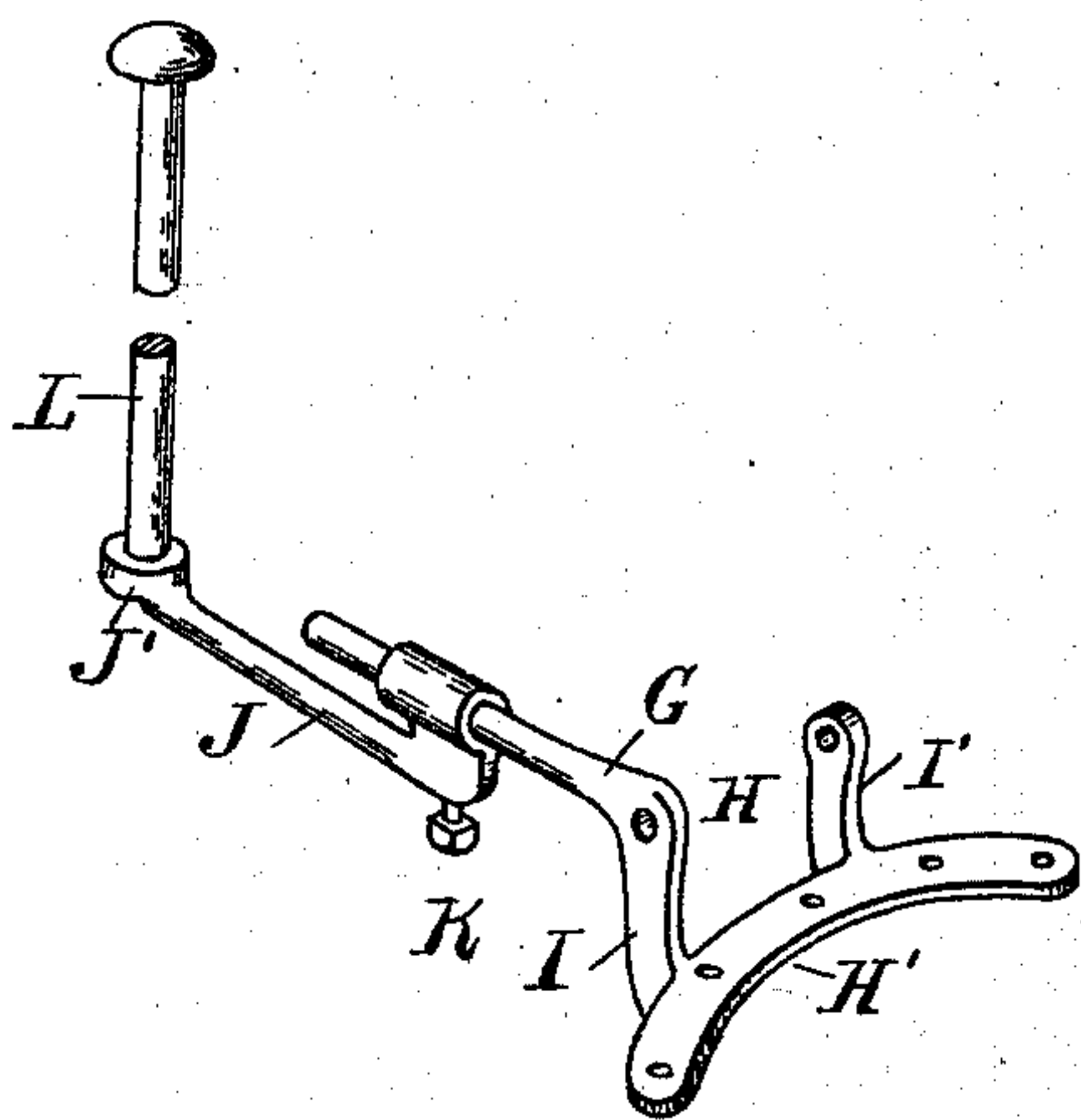
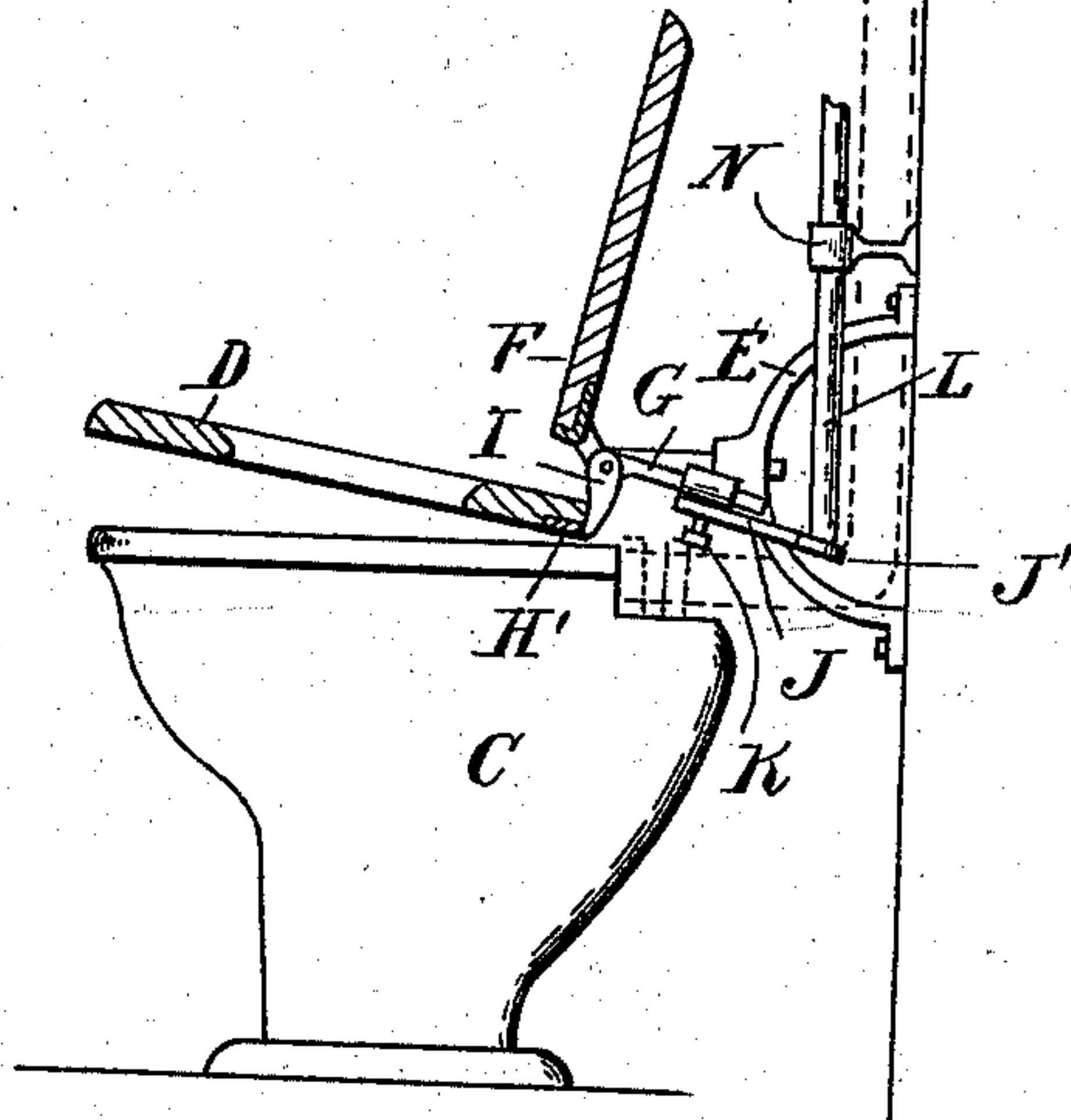
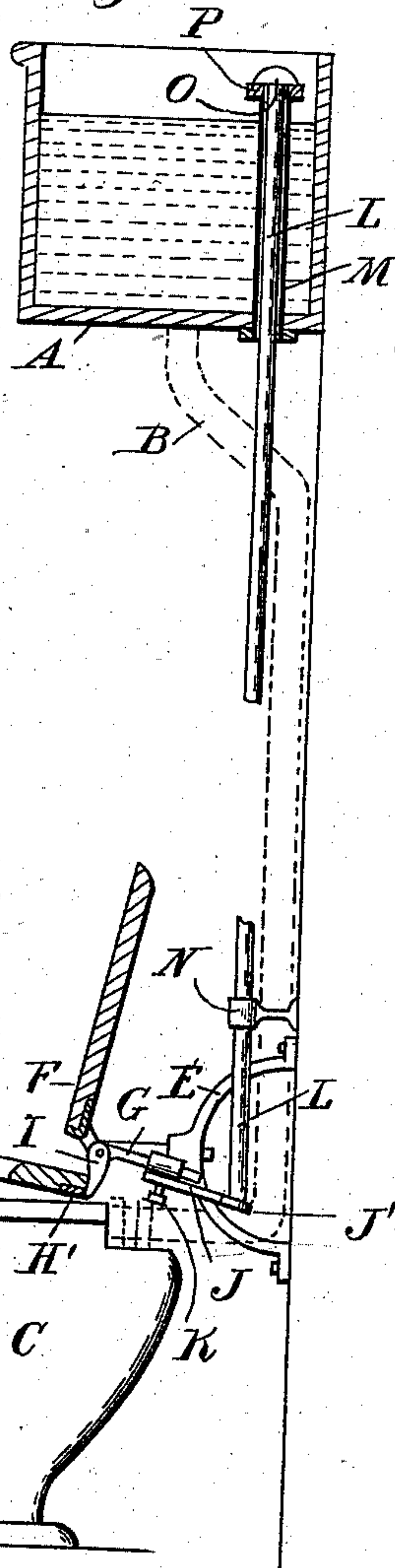


Fig. 1.



Witnesses
A. C. Hobby

A. F. Barthel

Inventor
David D. Buick
By *Wm. S. Sprague* Atty's.

UNITED STATES PATENT OFFICE.

DAVID D. BUICK, OF DETROIT, MICHIGAN.

WATER-CLOSET.

SPECIFICATION forming part of Letters Patent No. 558,932, dated April 28, 1896.

Application filed July 8, 1895. Serial No. 555,258. (No model.)

To all whom it may concern:

Be it known that I, DAVID D. BUICK, a citizen of the United States, residing at Detroit, in the county of Wayne and State of Michigan, have invented certain new and useful Improvements in Water-Closets, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates more particularly to that class of closets in which the flushing-valve is automatically operated by the seat.

It is the object of my invention to simplify the construction of the connecting mechanism and render it less liable to become inoperative; and the invention consists in the peculiar construction, arrangement, and combination of parts, as more fully hereinafter described.

In the drawings, Figure 1 is a sectional side elevation of my closet. Fig. 2 is a longitudinal section through the tank. Fig. 3 is a detached perspective view of the valve-operating mechanism. Figs. 4 and 5 are details more specifically referred to by letters of reference.

A is the tank, B is the flushing-pipe, and C is the bowl, all of usual construction.

D is a seat hinged either to the bowl or, as shown in the drawings, to the brackets E, secured to the wall. F is a hinged cover. G is an arm secured to the seat and extending rearwardly therefrom. I preferably form this arm G as an integral part of the bracket H, comprising the securing-plate H' and the hinge-lugs I and I', this bracket being screwed or otherwise secured to the under side of the seat. I also preferably provide the arm G with the extension-arm J, adjustably secured thereto by the set-screw K and terminating in the cupped end J'.

L is a counterweight-rod resting upon the extremity of the arm J, extending upward to the tank A and preferably passing through a tube M in the tank.

N is a suitable guide-bearing for the lower end of the rod.

O is a lug or collar on the upper end of the rod, and P is an elastic washer below said collar.

Q is a valve controlling the flush-pipe, which may be of any suitable construction adapted to be tripped by the fall of the rod L.

In the drawings I have shown the lever R connected to the valve by the link S, the free end of the lever being provided with a latch T, projecting into proximity to the rod L.

The parts thus constructed and arranged are normally in the position shown in Fig. 1. The rod L is of sufficient weight to more than counterbalance the seat D, holding the latter tilted or raised from the bowl, the collar O at the upper end of the rod resting on the elastic washer P upon the tube M.

Whenever the seat is depressed, the rod is elevated, the collar O lifting the latch T on the end of the trip-lever R and passing above the same. Upon releasing the seat the rod will fall, the collar O striking the end of the lever and tripping the valve.

The extension-arm J may be adjusted to give more or less leverage upon the seat, and to provide for adjusting the position of the bowl without changing the leverage I preferably secure to the lower end of the rod L the adjustable foot U. This foot (shown in Figs. 4 and 5) comprises the laterally-extending arm V, having the clamping-sleeve V', and the vertical rod W, having the clamping-sleeve W', by means of which any necessary adjustment may be made.

What I claim as my invention is—

1. In a water-closet, the combination with the hinged seat of an arm secured thereto and extending to the rear of the hinge, a vertically-movable counterweight extending upward to the flushing-tank, a foot vertically and horizontally adjustably secured to said rod and resting upon the extremity of said arm, and a trip connection between the upper end of said rod and the flushing-valve adapted to be operated by the fall of the rod.

2. In a water-closet the seat provided with the hinge-bracket H comprising the securing-plate H', the lugs I and I', the rearwardly-extending arm G and adjustable extension J, in combination with the stationary member of the hinge, the counterweight-rod L resting upon the extremity of the arm J and extending upward to the flushing-tank, and a trip connection between the upper end of said rod and the flushing-valve, adapted to be operated by the fall of the rod.

3. In a water-closet, the combination with the hinged seat, an arm secured thereto ex-

tending to the rear of the hinge and a counterweight-rod resting upon the extremity of said arm and extending upward to the flushing-tank, of the tube M through which said
5 rod passes, the collar O at the upper end of said rod, the trip-lever R provided with the latch T, the valve Q and link S, substantially as and for the purpose set forth.

4. In a water-closet, the combination with
10 a tank and a flushing-valve, of a lever for actuating said valve, a seat, a rod connected

to and actuated by the seat, and a shoulder on the upper end of the rod normally out of engagement with the lever and arranged to actuate the lever upon the downward move- 15
ment of the rod, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

DAVID D. BUICK.

Witnesses:

JAMES WHITTEMORE,
O. F. BARTHEL.